

Docket No.: 07641.0003.CNUS02
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Bill E. Cham

Confirmation No. 2329

Application No.: 10/752,095

Group Art Unit: 1623

Filed: January 1, 2004

Examiner: Elli Peselev

Title: Medicinal Compositions and Their
Method of Preparation

RESPONSE TO OFFICE ACTION DATE FEBRUARY 12, 2008

MS Amendment

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sirs:

Amendments to the Specification: there are no amendments to the specification.

Amendments to the Claims begin on page 2 of this correspondence.

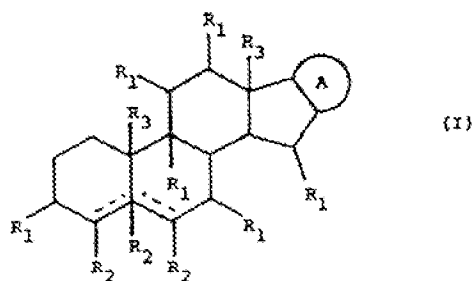
Remarks begin on page 7 of this correspondence.

AMENDMENT TO THE CLAIMS

Prior to further examination please amend the claims as follows. The following listing of claims replaces all prior versions/listings of the claims in the present application.

1 - 23 (Canceled)

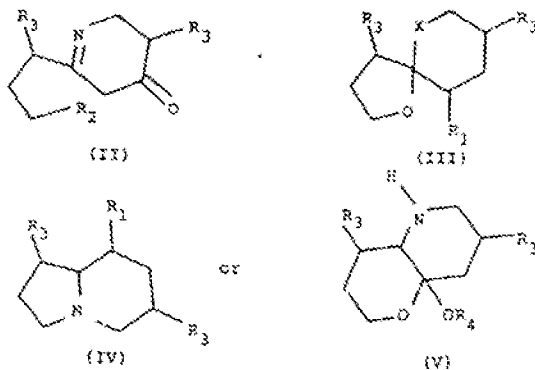
24. (Previously presented) A method of preparing a glycoalkaloid preparation the method comprising the step of removing free sugars that are present in a purified crystalline or semi-crystalline glycoalkaloid preparation as degradation products of the glycoalkaloid(s) in the preparation wherein the glycoalkaloid preparation comprises at least one glycoalkaloid of the general formula I:



wherein:

either one of the dotted lines represents a double bond, and the other a single bond, or both represent single bonds;

A: represents a radical selected from the following radicals of general formulae (II) to (V):



each of R^1 is a radical separately selected from the group consisting of hydrogen, amino, oxo and OR^4 ; each of R^2 is a radical separately selected from the group consisting of hydrogen, amino and OR^4 ; each of R^3 is a radical separately selected from the group consisting of hydrogen, alkyl and R^4O -alkylene; each of R^4 is a radical separately selected from the group consisting of hydrogen and carbohydrate "X" is a radical selected from the group consisting of $-CH_2-$, $-O-$ and $-NH-$;

wherein the compound includes at least one R^4 group in which R^4 is a carbohydrate

wherein said method produces a glycoalkaloid preparation that is substantially free of sugars resulting the degradation of the glycoalkaloids of said preparation.

25. (Previously Presented) The method of claim 24 wherein R^4 is selected from the group consisting of glyceric aldehyde; glycerose; erythrose; threose; ribose; arabinose; xylose; lyxose; altrose; allose; gulose; mannose; glucose; idose; galactose; talose; rhamnose; dihydroxyactone; erythrulose; ribulose; xylulose; psicose; fructose; sorbose; tagatose; and other hexoses ($C_6H_{12}O_6$); heptoses ($C_7H_{14}O_7$); octoses ($C_8H_{16}O_8$); nanoses ($C_9H_{18}O_9$); decoses ($C_{10}H_{20}O_{10}$); deoxysugars with branched chains; compounds wherein the aldehyde, ketone or hydroxyl groups have been substituted; sugar alcohols; sugar acids; benzimidazoles; the enol salts of the carbohydrates; saccharinic acids; sugar phosphates.

26. (Previously Presented) The method of claim 24 wherein the at least one glycoalkaloid is selected from the group consisting of solasonine, solamargine, and tomatine.

27. (Previously Presented) The method of claim 24 wherein the free sugar is rhamnose, or a disaccharide, trisaccharide, oligosaccharide or polysaccharide having rhamnose as a sugar moiety thereof.

28. (Previously Presented) The method claim 24 wherein the crystalline or semi-crystalline glycoalkaloid preparation is also treated to remove any aglycone therefrom.

29. (Previously Presented) The method of claim 24 wherein essentially all the free sugars are removed from the crystalline or semi-crystalline glycoalkaloid preparation by washing the extract with an aqueous solvent.

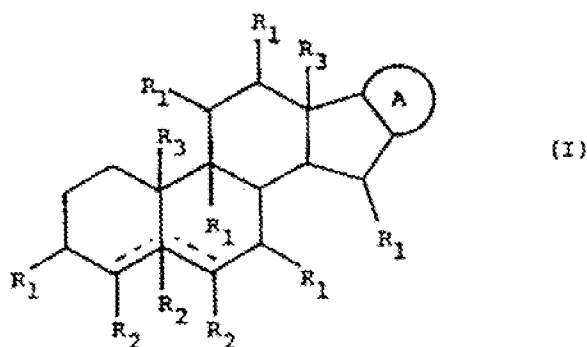
30. (Previously Presented) The method of claim 28 wherein the aglycone is removed from the preparation by washing the preparation with an chlorinated hydrocarbon solvent.

31. (Previously Presented) The method of claim 30 wherein chlorinated hydrocarbon is chloroform.

32. (Previously Presented) The method of claim 24 wherein a time period of at least about 7 days has elapsed between the extraction and removal steps.

Claims 33 - 42(Cancelled)

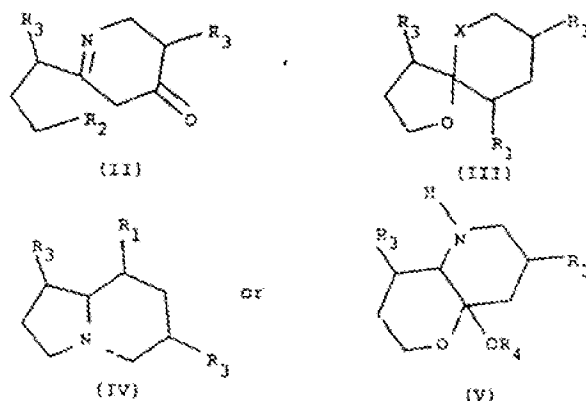
43. (Previously Presented) A method of preparing a glycoalkaloid preparation the method comprising the step of removing free sugars that are present in a purified crystalline or semi-crystalline glycoalkaloid preparation as degradation products of the glycoalkaloid(s) in the preparation wherein the glycoalkaloid preparation comprises at least one glycoalkaloid of the general formula I:



wherein:

either one of the dotted lines represents a double bond, and the other a single bond, or both represent single bonds;

A: represents a radical selected from the following radicals of general formulae (II) to (V):



Each of R¹ is a radical separately selected from the group consisting of hydrogen, amino, oxo and OR⁴; each of R² is a radical separately selected from the group consisting of hydrogen, amino and OR⁴; each of R³ is a radical separately selected from the group consisting of hydrogen, alkyl and R⁴O-alkylene; each of R⁴ is a radical separately selected from the group consisting of hydrogen and carbohydrate "X" is a radical selected from the group consisting of -CH₂-, -O- and -NH-;

wherein the compound includes at least one R⁴ group in which R⁴ is a carbohydrate;

the method including extracting the at least one glycoalkaloid from a suitable plant material to form crystalline or semi-crystalline extract and removing free sugars that are degradation products of the glycoalkaloid in the crystalline or semi-crystalline extract.

44. (Previously Presented) The method of claim 43, wherein R⁴ is selected from the group consisting of glyceric aldehyde; glycerose; erythrose; threose; ribose; arabinose; xylose; altrose; allose; gulose; mannose; glucose; idose; galactose; talose; rhamnose; dihydroxyactone; erythrulose; ribulose; xylulose; psicose; fructose; sorbose; tagatose; and other hexoses (C₆H₁₂O₆); heptoses (C₇H₁₄O₇); octoses (C₈H₁₆O₈); nanoses (C₉H₁₈O₉); decoses (C₁₀H₂₀O₁₀); deoxysugars with branched chains; compounds wherein the aldehyde, ketone or hydroxyl groups have been substituted; sugar alcohols; sugar acids; benzimidazoles; the enol salts of the carbohydrates; saccharinic acids; sugar phosphates.

45. (Previously Presented) The method of claim 43, wherein the at least one glycoalkaloid is selected from the group consisting of solasonine, solamargine, and tomatine.

46. (Previously Presented) The method of claim 43 wherein the plant material is from a plant of the Solanum genus.

47. (Previously Presented) The method of claim 43, wherein the extract is BEC.

48. (Previously Presented) The method of claim 43, wherein the free sugar is rhamnose, or a disaccharide, trisaccharide, oligosaccharide or polysaccharide having rhamnose as a sugar moiety thereof.

49. (Previously Presented) The method of claim 43 wherein the extract is also treated to remove any aglycone therefrom.

50. (Previously Presented) The method of claim 43 wherein essentially all the free sugars are removed from the solid extract by washing the extract with an aqueous solvent.

51. (Previously Presented) The method of claim 49 wherein the aglycone is removed from the solid extract by washing the preparation with a chlorinated hydrocarbon solvent.

52. (Previously Presented) A method of claim 51 wherein chlorinated hydrocarbon is chloroform.

53. (Previously Presented) The method of claim 43 wherein a time period of at least about 7 days has elapsed between the extraction and removal steps.

Claims 54 - 63(Cancelled)

64. (Previously Presented) The method of claim 24, wherein said step of removing free sugar from a solid glycoalkaloid preparation comprises removing essentially all of the free sugar from the glycoalkaloid preparation.

Claims 65 - 66(Cancelled)